

CLAIMS

What is claimed is:

- 5 1. A method of testing electromagnetic signal strength near a target area,
comprising:
- establishing test parameters,
 employing a service enterprise having a fleet of vehicles serving a
territory near said target area, each of said vehicles assigned to one of a plurality of
10 routes according to a dispatch plan, said dispatch plan comprising vehicle data and
route data,
 comparing said test parameters to said dispatch plan for each of said
plurality of routes,
 identifying one or more optimal routes from among said plurality of
15 routes based on the results of said comparing, said optimal routes comprising those
most nearly satisfying said test parameters,
 installing one of a plurality of electromagnetic signal testing units in
the vehicle assigned to each of said one or more optimal routes, and
 receiving data gathered by each of said plurality of signal testing units.
- 20 2. The method of claim 1, wherein the step of establishing test
parameters further comprises storing a geographic parameter,
 and wherein said route data includes a start location, an end location,
and one or more intermediate stop locations.

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3. The method of claim 2, wherein said step of storing a geographic parameter further comprises:

storing one or more tower identifiers, each defining a tower location,
and

5 storing one or more sector identifiers, each of said one or more sector identifiers comprising a sector location and an antenna configuration.

4. The method of claim 2, wherein the step of establishing test parameters further comprises storing a time parameter describing a time window,

10 and wherein said route data includes a start time corresponding to said start location, an end time corresponding to said end location, and one or more intermediate stop durations corresponding to said one or more intermediate stop locations.

15 5. The method of claim 4, wherein said step of storing a time parameter further comprises:

storing one or more lingering parameters, each of said one or more lingering parameters comprising a linger duration, a tower identifier, and a sector identifier.

20 6. The method of claim 1, wherein said step of establishing test parameters further comprises:

storing one or more unit parameters, each of said one or more unit parameters comprising a unit type and a unit feature, and

25 storing a quantity parameter defining an available number of said units,

and wherein said vehicle data includes a number of vehicles in said fleet.

7. The method of claim 1, wherein said step of installing further comprises providing a universal bracket in each vehicle in said fleet, said bracket configured to releasably receive any of a variety of types of said testing units.

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8. The method of claim 1, wherein said step of establishing test parameters further comprises:

assigning a weight to one or more of said test parameters, each of said weights correlated to the importance of said one or more of said test parameters relative to the others.

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9. The method of claim 1, wherein said step of comparing said test parameters to said dispatch plan is executed by a computer software program product.

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10. The method of claim 1, wherein said step of establishing said test parameters is accomplished by a wireless provider, said wireless provider generally unrelated to said service enterprise.

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11. A computer software program product for testing electromagnetic signal strength near a target area, comprising:

a first executable portion configured to store test parameters,

a second executable portion configured to store a dispatch plan for a
5 fleet of vehicles serving a territory near said target area, each of said vehicles
assigned to one of a plurality of routes according to a dispatch plan, said dispatch
plan comprising vehicle data and route data,

a third executable portion configured to compare said test parameters
to said dispatch plan for each of said plurality of routes,

10 a fourth executable portion configured to identify one or more optimal
routes from among said plurality of routes based on the results of said third
executable portion, said optimal routes comprising those most nearly satisfying said
test parameters,

a fifth executable portion configured to identify the vehicle assigned
15 to each of said one or more optimal routes, said vehicle to receive one of a plurality
of electromagnetic signal testing units,

a sixth executable portion configured to receive data gathered by each
of said plurality of signal testing units.

20 12. The computer software program product of claim 11, wherein said
first executable portion is further configured to store test parameters including a
geographic parameter,

and wherein said second executable portion is further configured to
store route data including a start location, an end location, and one or more
25 intermediate stop locations.

13. The computer software program product of claim 12, wherein said first executable portion is further configured to store test parameters including a geographic parameter comprising:

one or more tower identifiers, each defining a tower location, and
one or more sector identifiers, each of said one or more sector
identifiers comprising a sector location and an antenna configuration.

14. The computer software program product of claim 12, wherein said first executable portion is further configured to store test parameters including a time
parameter describing a time window,

and wherein said second executable portion is further configured to
store route data including a start time corresponding to said start location, an end
time corresponding to said end location, and one or more intermediate stop durations
corresponding to said one or more intermediate stop locations.

15. The computer software program product of claim 14, wherein said first executable portion is further configured to store test parameters including a time
parameter comprising:

one or more lingering parameters, each of said one or more lingering
parameters comprising a linger duration, a tower identifier, and a sector identifier.

16. The computer software program product of claim 11, wherein said first executable portion is further configured to store test parameters including:

one or more unit parameters, each of said one or more unit parameters
comprising a unit type and a unit feature, and

a quantity parameter defining an available number of said units,
and wherein said second executable portion is further configured to
store vehicle data including a number of vehicles in said fleet.

17. The computer software program product of claim 11, wherein said first executable portion is further configured to store a weight assigned to one or more of said test parameters, each of said weights correlated to the importance of said one or more of said test parameters relative to the others.

18. A system for testing electromagnetic signal strength near a target area, comprising:

a plurality of electromagnetic signal testing units,

a wireless provider establishing test parameters,

5 a service enterprise having a fleet of vehicles serving a territory near said target area, each of said vehicles in said fleet assigned to one of a plurality of routes according to a dispatch plan, said dispatch plan comprising vehicle data and plan data,

means for comparing said test parameters to said dispatch plan for
10 each of said plurality of routes,

means for identifying one or more optimal routes from among said plurality of routes based on results from said comparing means, said optimal routes comprising those most nearly satisfying said test parameters,

one of said plurality of testing units installed in the vehicle assigned to
15 each of said one or more optimal routes,

a receiver for receiving data gathered by each of said plurality of signal testing units.

19. The system of claim 18, wherein said test parameters comprise a
20 geographic parameter,

and wherein said route data includes a start location, an end location, and one or more intermediate stop locations.

20. The system of claim 19, wherein said geographic parameter further
25 comprises:

one or more tower identifiers, each defining a tower location, and

one or more sector identifiers, each of said one or more sector identifiers comprising a sector location and an antenna configuration.

21. The system of claim 18, wherein said test parameters further comprise a time parameter describing a time window,

and wherein said route data includes a start time corresponding to said
5 start location, an end time corresponding to said end location, and one or more
intermediate stop durations corresponding to said one or more intermediate stop
locations.

22. The system of claim 21, wherein said time parameter further
10 comprises:

one or more lingering parameters, each of said one or more lingering
parameters comprising a linger duration, a tower identifier, and a sector identifier.

23. The system of claim 18, wherein said test parameters further
15 comprise:

one or more unit parameters, each of said one or more unit parameters
comprising a unit type and a unit feature, and

a quantity parameter defining an available number of said units,
and wherein said vehicle data includes a number of vehicles in said
20 fleet.

24. The system of claim 18, further comprising:
a universal bracket in each vehicle in said fleet, said bracket
configured to releasably receive any of a variety of types of said testing units.

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25. The system of claim 18, wherein said test parameters further
comprise:

a weight assigned to one or more of said test parameters, each of said
weights correlated to the importance of said one or more of said test parameters
5 relative to the others.

26. The system of claim 18, wherein said comparing means comprises a
computer software program product.

10 27. The system of claim 18, wherein said identifying means comprises a
computer software program product.

28. The system of claim 18, wherein said wireless provider is generally
unrelated to said service enterprise.

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